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EXAMINER

ROSSI, JESSICA

ART UNIT PAPER NUMBER

1733

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/018,250

Applicant(s)

SPEER ET AL.

Examiner

Jessica L. Rossi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 9/16/04, Amendment.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 31-61 is/are pending in the application.
- 4a) Of the above claim(s) 47-60 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-46 and 61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 31-46, in the reply filed on 9/16/04 is acknowledged. The traversal is on the ground(s) that the Group I and Group II claims have the common technical feature of coating an optically readable data carrier. If Applicant believes this to be the common technical feature, the examiner would then like to point out that such a feature is known in the prior art, as taught by Takeda (EP 485366; primary reference applied in the rejections set forth below), and therefore unity of invention is still lacking and restriction is still proper. The traversal is also on the grounds that the special technical feature relating to the transparent adhesive film shared by the Groups is in fact not taught by Takada or any prior art for the reasons set forth in Applicant's arguments on p 10. The examiner points out that present claims 31, 47 and 57 are not limited to a pre-formed adhesive layer and therefore the common technical feature shared by the Groups relating to a transparent adhesive film is taught by Takada such that unity of invention is still lacking and restriction is still proper.

The requirement is still deemed proper and is therefore made FINAL.

### ***Response to Amendment***

2. This action is in response to the amendment dated 9/16/04. Claim 61 was added. Claims 31-61 are pending. Claims 47-60 remain withdrawn from further consideration.
3. The abstract filed on 8/9/04 does not present any new matter.
4. Support for the limitations in new claim 61 can be found on p. 11-12 and Figure 2 of the specification.

5. The rejection of claim 34 under 35 U.S.C. 112 2<sup>nd</sup> paragraph, as set forth in paragraph 10 of the previous office action, has been withdrawn in light of the present amendment. Support can be found on p. 3, lines 1-9 of the specification.

6. The rejection of claims 31-46 under obviousness-type double patenting as being unpatentable over claims 37-53 of copending application 10/018,143, as set forth in paragraphs 20-21 of the previous office action, has been withdrawn in light of the present amendment to claims 37 and 52 of the '143 application dated 9/2/04.

### *Specification*

7. The disclosure stands objected to because of the following informalities:

Page 2, line 8: "an" should be replaced by --a-- before "covering".

Page 13, line 16: "umP rovided on the adhesive film is the C tape 64" should be --um provided on the adhesive film is the PC tape 64-- (note this objection was made in previous office action but no correction was made by Applicant).

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 31, 33, 36, 40, and 42-43 stand rejected under 35 U.S.C. 102(b) as being anticipated by Takeda (EP 485366; of record), as set forth in paragraph 12 of the previous office action.

With respect to claim 31, Takeda is directed to a method of coating an optically readable data carrier (abstract). The references teaches two alternative embodiments depicted in Figures

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10 and 11 where the order of the layers differs but the **process used to laminate the layers in each embodiment is the same** (reference refers to lamination process as “process (1)”). This lamination process comprises applying a transparent adhesive film 2 (p. 7, lines 48-50, p. 3, lines 25-30; skilled artisan would have appreciated a “film” can be a coating or a preformed layer wherein the adhesive of Takeda is at least a coating if not a preformed layer) to **at least one of the surfaces to be adhered** and subsequently stacking/laminating the surfaces (p. 7, lines 10-12 and 30-32 and 45-48). In Figure 10 the laminated “surfaces” are the data carrier surface 4 (p. 3, line 34 – p. 4, line 25) and support substrate 1 (p. 3, line 10), whereas in Figure 11 the laminated “surfaces” are transparent covering film 5 (p. 4, lines 31 and 37) and the data carrier surface 4.

Therefore, since the laminates depicted in Figures 10 and 11 use the same lamination process, Figure 11 teaches applying transparent adhesive film 2 to the data carrier surface 4, applying transparent adhesive film 2 to the surface of the transparent covering film 5, and subsequently applying the transparent covering film 5 to the transparent adhesive film 2 located on the data carrier surface to stack/laminate the surfaces. *It is noted that the present claim does not exclude adhesive being present on the surface of covering film 5 such that covering film 5 is applied to the adhesive located on the data carrier surface 4 via the adhesive located on covering film 5.*

Regarding claim 33, Takeda teaches covering film 5 being a PC (polycarbonate) tape (p. 4, lines 37-39).

Regarding claim 36, Takeda teaches a shape and size of the covering film and adhesive film corresponding to the data carrier surface (p. 7, lines 13-14).

Regarding claim 40, Takeda teaches pressing the adhesive film and covering film against the data carrier surface via a rotating pressure roller (p. 7, lines 10-12).

Regarding claim 42, Takeda teaches the covering film 5 being held above the data carrier surface prior to bonding and therefore teaches the covering film being held at a pre-specified angle relative to the data carrier surface (Figure 10).

Regarding claim 43, the skilled artisan would have appreciated that either the pressure roller and/or the data carrier surface would have to be moving during this pressing operation; note 'relative movement' can be created by rotating the roller, the data carrier surface, or both.

***Claim Rejections - 35 USC § 103***

10. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

11. Claims 44-45 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. as applied to claim 43 above and further in view of Ozawa et al. (JP 6-293322; of record), as set forth in paragraph 14 of the previous office action.

Regarding claim 44, Applicant is directed to the paragraphs above for a complete discussion of Takeda. Takeda is silent as to the data carrier surface moving linearly past the pressure roller. It would have been obvious to the skilled artisan at the time the invention was made to move the data carrier surface linearly past the pressure roller because linearly moving a substrate past a pressing roller is known in the laminating art, as taught by Ozawa (Figure 1; abstract; on-line translation), thereby allowing for continuous mass production wherein the data carrier can be transferred to multiple processing stations in an efficient manner.

Regarding claim 45, it would have been obvious to synchronize the rotation of the roller with movement of the data carrier surface because this would ensure that the roller performs its pressing operation when a data carrier surface is beneath it.

12. Claims 31, 33, 36, 40 and 42-43 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. in view of Iida et al. (US 4961979), as set forth in paragraph 15 of the previous office action.

*\*It appears the present invention is directed to applying the covering film directly to the adhesive film located on the data carrier surface but the present claims are not limited to such. However, the following rejection is set forth to expedite prosecution.*

With respect to claim 31, Applicant is directed to the paragraphs above for a complete discussion of Takeda. Once again the examiner points out that Takeda teaches applying transparent adhesive film 2 (p. 7, lines 48-50) to **at least one of the surfaces to be adhered** and then stacking the surfaces (p. 7, lines 10-12 and 30-32 and 45-48).

Therefore, with respect to the embodiment depicted in Figure 11, the skilled artisan would have appreciated that Takeda also teaches applying the adhesive film 2 to **only one** of the surfaces to be adhered. As to whether or not that surface belongs to the covering film 5 or the data carrier surface 4, such would have been within purview of the skilled artisan at the time the invention was made because only the expected lamination results would have been achieved regardless of which surface the adhesive is applied thereto; especially since Takeda teaches both surfaces being capable of receiving adhesive.

However, it would have been obvious to the skilled artisan to apply the adhesive film 2 to only the data carrier surface 4 such that the covering film 5 is **directly** applied to the adhesive

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film located on the data carrier surface because it is known in the art to apply an adhesive coating/film 22 to a data carrier surface 1 and subsequently apply a covering film 23 **directly** to the adhesive film, as taught by Iida (column 3, lines 56-60; column 7, lines 25-26 and **38-44**).

Regarding claims 33, 36, 40, and 42-43 please refer to the paragraphs above.

13. Claims 32, 34-35, 38-46 and 61 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al. and Iida et al. as applied to claim 31 in paragraph 12 above, and further in view of Amo (US 6200402; of record), as set forth in paragraph 16 of the previous office action.

Regarding claim 32, Takeda teaches the adhesive film being a variety of materials such as **acrylic** (p. 3, line 30) but is silent as to what form the adhesive is in. (please note Applicant's adhesive film is a pressure sensitive adhesive layer 25 that does not require a carrier material; however this adhesive layer 25 is sandwiched between a carrier film 26 and a release film 24 wherein the release film is peeled off, the adhesive is pressed onto a data carrier surface via a pressure roller 33, and the carrier film is removed during or after this pressing step - Figure 2, p. 6, lines 14-16, p. 7, lines 20-21)

It is known in the art to apply an adhesive film comprising a **pre-formed** acrylic pressure sensitive adhesive layer S2 without carrier material (column 6, lines 46-50) by peeling a release film S3 from the adhesive layer and pressing the adhesive layer onto a data carrier surface D1 via a pressing roller 1 that moves relative to the data carrier surface wherein a carrier film S is removed from the adhesive layer after this pressing step, as taught by Amo (Figure 1; column 2, lines 50-62). Amo teaches such an adhesive film being an improvement over prior art adhesive films (i.e. film coatings, adhesive film layers applied by hand) because its application allows for



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the elimination of air bubbles between the adhesive and data carrier surface and hence uniform bonding between the two (column 1, line 58 – column 2, line 20; column 2, lines 37-41; column 10, lines 60-65).

Therefore, since Takeda teaches the adhesive can be acrylic without being limited to any particular form for the adhesive and Amo teaches the adhesive film can be a pre-formed acrylic PSA layer without carrier material, it would have been obvious to the skilled artisan at the time the invention was made to use a **pre-formed** adhesive layer without carrier material for the adhesive film of Takeda because such is known in the art, as taught by Amo, wherein such a film can be applied via a pressing roller thereby eliminating air bubbles between the adhesive film and data carrier surface thereby producing a uniform bond between the two.

Regarding claim 34, Amo teaches peeler 4 withdrawing the adhesive film S2 from a carrier film S after application of the adhesive film to the data carrier surface D1 (Figures 9-10; column 4, lines 48-51).

Regarding claim 35, Amo teaches withdrawing a protective film S3 from the adhesive film prior to application of the adhesive film (column 2, lines 50-62).

Regarding claims 38-39, Amo teaches applying the adhesive film to the data carrier surface in a centered manner by means of a centering shaft 3 wherein the shaft aligns the adhesive prior to the step of pressing the adhesive thereon (Figure 3; column 3, lines 42-43).

Regarding claim 40, Amo teaches applying the adhesive film by pressing it against the data carrier surface via a rotating pressure roller 1 (Figure 1; column 8, lines 20-25).

Regarding claim 41, Amo is silent as to controlling a pressure of the pressure roller 1. It would have been obvious to the skilled artisan at the time the invention was made to control the

pressure applied by the roller because such is known in the laminating art for preventing possible damage caused by excessive pressing or for preventing production of an inferior product caused by inadequate pressing.

Regarding claim 42, Amo teaches the adhesive film being held at a pre-specified angle relative to the data carrier surface (column 3, lines 45-47; column 9, lines 45-50).

Regarding claim 43, Amo teaches the roller moving along the surface of the data carrier and therefore teaches the roller and data carrier surface being moved relative to each other (column 8, lines 30-39); note 'relative movement' can be created by rotating the roller, the data carrier surface, or both.

Regarding claim 44, there is no indication when this movement occurs and the term 'linearly' interpreted broadly can indicate the substrate moves along a line, whether it be straight or curved. Therefore, since Amo teaches returning roller 1 to its starting position downstream of the rotary table T (Figures 6-9) after applying the adhesive film to the data carrier at station X located along a path of rotary table 2 and rotating table 2 clockwise to position the data carrier at station Y, the skilled artisan would have appreciated that the data carrier is moved 'linearly' along a curved line past roller 1 when moving from station X to station Y (Figure 14; column 12, lines 34-42).

Regarding claim 45, it would have been obvious to synchronize the rotation of the roller 1 with movement of the rotary table 2, and hence movement of the data carrier surface D1 located thereon, because this would ensure that the roller performs its pressing operation when a data carrier surface is present at adhesive applying station X.

Regarding claim 46, Amo teaches the adhesive layer being a pressure sensitive adhesive (column 6, lines 46-50).

Regarding claim 61, all the limitations were addressed above with respect to claims 31-32 in paragraphs 12-13 of the present office action.

14. Claim 37 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Takada et al. and Iida et al. as applied to claim 31 above, and further in view of Amo and Deurer et al. (US 5891290; of record), as set forth in paragraph 17 of the previous office action.

Regarding claim 37, Takeda teaches the adhesive film and covering film corresponding to a shape and size of the data carrier surface (Figures 10-11; p. 7, lines 14-15) but is silent as to punching at least one of them onto a carrier film. Applicant is directed to the rejection of claim 32 set forth above for motivation to use the pre-formed PSA layer of Amo for that of Takeda.

It would have been obvious to the skilled artisan at the time the invention was made to place the adhesive film of Takeda in view of Amo onto the carrier film by punching sections cut out from a continuous film because such is known in the art, as taught by Deurer (teaches punching out sections 10 cut out from film 20 onto carrier film 21; see claim 1; column 3, lines 24-25), wherein this allows for direct transfer of the cut out portions onto the carrier film.

15. Claim 44 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al., Iida and Amo as applied to claim 43 above, and further in view of Ozawa et al., as set forth in paragraph 18 of the previous office action.

\*It is noted that present invention is directed to 'linear movement' of the data carrier surface being in a straight line. Although the present claim language is not limited to such

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(linear movement can be along a line that is straight or curved), the following rejection is set forth to expedite prosecution.

Regarding claim 44, it would have been obvious to the skilled artisan at the time the invention was made to substitute the rotary table 2 of Amo with linear conveying means that moves the data carrier surface in a straight line past the pressing roller 1 because such is known in the laminating art, as taught by Ozawa, wherein this allows for simple, straight line progression of the process.

### ***Double Patenting***

16. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

17. Claims 31-46 and 61 stand provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 32-40, 42, and 46-48 of copending Application No. 10/018,144 in view of Takeda et al., as set forth in paragraph 22 of the previous office action.

With respect to claim 31, the claims of the copending application teach all the limitations except the first substrate being a data carrier surface, the adhesive film being transparent, and the second substrate being a covering film. It would have been obvious to the skilled artisan at the

time the invention was made to have first substrate be a data carrier surface, the adhesive film be transparent, and the second substrate be a covering film because such is known in the art, as taught by Takeda (see paragraph 12 above for complete discussion), wherein a transparent adhesive allows laser to pass through it and read the data carrier surface while a covering film serves to protect both the adhesive and data carrier surface.

Regarding claim 33, Takeda teaches the covering film being a PC tape.

Regarding claims 32 and 34-46, the copending application teaches all the limitations.

This is a provisional obviousness-type double patenting rejection.

#### *Response to Arguments*

18. Applicant's arguments filed 8/9/04 have been fully considered but they are not persuasive.

19. Applicant argues on p. 10 with respect to claim 31 that Takada fails to indicate or even hint that the adhesive layer is a pre-formed layer.

The examiner points out that present claim 31 is not limited to a pre-formed adhesive layer. Therefore, present claim 31 does not exclude an adhesive layer that is not pre-formed, such as an adhesive that is coated onto the carrier surface to form an adhesive film. In fact, present claim 31 states "A method of **coating** an optically readable data carrier..." wherein the skilled artisan would have readily appreciated the act of coating most often being associated with layers that are not pre-formed but instead coated onto the carrier surface.

20. Applicant argues on p. 10 with respect to claim 31 that Takada teaches stacking the layers of Example 2 via an epoxy resin, which is a teaching to one of skill in the art to deploy a fluid adhesive.

The examiner once again points out that present claim 31 is not limited to a pre-formed adhesive layer and therefore does not exclude a fluid adhesive that is coated onto the carrier surface to form an adhesive film. However, the examiner would also like to point out that Applicant's assertion that the epoxy adhesive in Example 2 of Takeda is a fluid is mere speculation since the reference says nothing to suggest that the adhesive is a fluid and wherein the skilled artisan would have readily appreciated the stacking of layers via a pre-formed adhesive layer also being known in the art.

Furthermore, the examiner would like to point out that Takada teaches other examples where the adhesive can be an acrylic, wherein the skilled artisan would have appreciated the type of adhesive and its form not being critical to the invention of Takada such that the skilled artisan would have been motivated to use the acrylic adhesive of Takada in the form of a pre-formed acrylic PSA in light of the teachings of Amo, as set in paragraph 13 above.

21. Applicant also argues on p. 10 that the method of claim 31 is not anticipated or rendered obvious by the other prior art of record because it fails to disclose or suggest an adhesive in the form of a film in lieu of a fluid adhesive.

The examiner once again points out that present claim 31 is not limited to a pre-formed adhesive layer and therefore does not exclude a fluid adhesive that is coated onto the carrier surface to form an adhesive film. However, the examiner would also like to point out that the secondary reference to Amo does in fact teach the advantages of using a pre-formed adhesive film in lieu of a fluid adhesive wherein the skilled artisan would have been motivated by these advantages to use such a pre-formed adhesive film for that of Takada, as set forth in paragraph 13 above.

22. Applicant argues on p. 11 that the prior art of record fails to teach or suggest the limitations set forth in new claim 61.

Applicant is invited to reread the rejection of present claim 61 as set forth in paragraph 13 above.

***Conclusion***

23. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jessica L. Rossi** whose telephone number is **571-272-1223**. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine R. Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Art Unit 1733